

granular matter. The tubes never appear to terminate abruptly in free extremities."—*Brit. and For. Med.-Chirur. Rev.*, Oct. 1849, from *Philosophical Transactions*, 1849, Part I.

ORGANIC CHEMISTRY.

6. *On the Blood in Purpura*.—Dr. PARKES has published, in the *Lond. Med. Gazette*, Nov. 1848, two cases of purpura, which occurred in University College Hospital, and given analyses of the blood. The following are the results of his analysis:—

	A man aged 23.	A woman aged 18.
Water, - - - -	799.03	819.40
Solid residue, - - - -	200.97	180.60
	1000.00	1000.00
Blood-corpuscles, - - - -	119.611	93.66
Fibrin, - - - -	2.088	5.00
Albumen, - - - -	67.103	75.31
Extractive matters, - - - -	5.304	
Salts of the serum, - - - -	6.864	6.63
Consisting of		
Chloride of iodine, - - - -	2.938	2.530
Chloride of potassium, - - - -	.811	
Phosphate of soda, - - - -	.625	1.088
Sulphate of soda, - - - -	.363	
Peroxide of iron, - - - -	1.296	.602
Lime, - - - -	.077	.080 or less.

The most important points in the first analysis seem to be, *first*, that there is a general lowering of the solid constituents of the blood; *second*, that the relative proportion of the organic materials to each other seems preserved; and, *third*, that the most striking alteration in the inorganic compounds consists in a marked increase in the quantity of iron.

The urine was of high specific gravity, and carried off a larger amount of solids than was normal.

The treatment consisted in the administration of ten grains of nitrate of potash thrice daily, and the use of animal food. He was dismissed cured in one week.

In the second case, the chief point of interest was the great increase of fibrin. As neither inflammation nor rheumatism was present, it seemed difficult, at first sight, to understand why there should be this increase in this case and not in the former. The difficulty was, however, completely explained by the progress of the case. In other respects, the analysis agreed. The solid contents generally were lowered. Becquerel's average for healthy women is 208.1; and thus relatively the corpuscles would be nearly 104 in 1000 parts of blood, which is quite within the limits of health. The organic constituents in this case, as in the former, preserve their natural relation to one another, with the exception of the fibrin. The most marked change in the inorganic constituents is also in the increase of the iron. With only 95 of blood-corpuscles, it should have been reduced to about .4, whereas it has amounted to .602 in the 1000 parts. The potash was normal, and, as the patient had taken none as medicine, it is obvious that the appearance of purpura is not connected with a deficiency of this alkali in the blood.

This patient entered the hospital on the 7th of August. She was bled on the following day; on the 14th, an attack of articular rheumatism commenced, which was doubtless connected with the excess of fibrin, found on the 8th. On the 26th, she left the hospital cured, both of the purpura and the rheumatism. The augmentation of the fibrin, so long before any local manifestation, is worthy of notice.

In all the cases that Dr. Parkes has observed at University College Hospital, there has been deficiency in the quantity and want of variety in the food; but, from the close analogy between this disease and *morbus maculosus werlhofii* (which he has seen in soldiers in India, who had been well nourished, and who were unavailingly treated with tonics, generous diet, and fresh vegetables, but were cured both by turpentine and by creasote), he thinks that there is some other cause beyond dietetic errors.

7. *The Transformation of Sugar.*—M. BERNARD seems to have arrived at the conclusion that cane sugar is transformed into glucose by the action of the gastric juice; but, if it be in too great a quantity to be so transformed, it passes into the vena portæ unchanged, and undergoes its transformation into glucose in the liver. The functions of the liver appear, in part, at any rate, to consist of this formation of glucose or assimilable sugar.—*La Presse Médicale*, Oct. 21.

MATERIA MEDICA AND PHARMACY.

8. *Medicinal Wines.*—Dr. BUTLER LANE exhibited to the South-Eastern branch of the "Provincial Med. and Surg. Association," at the meeting in July last, various specimens of his Medicinal Wines, and made some observations respecting them. His proposition was to form fluid essences of most of the vegetable articles of the *Materia Medica*, by applying the process of fermentation. He recommended the method of preparation in question as characterized by simplicity and utility, and possessing the following advantages:—

1. The fermented preparations are more permanent than the infusions and decoctions, and at the same time more readily available.

2. In a great measure, the wines avoid the spirituous admixture of the tinctures, which is desirable, inasmuch as alcohol is ill adapted as a menstruum of many of the vegetable medicinal principles, often interfering with their due therapeutic influence, and, moreover, the alcohol which does exist in the medicinal wines is in a condition of intimate combination, which renders it far less noxious than the comparatively raw state which it maintains in the tinctures.

3. The economy of the fermented preparations is obvious, since three pounds of sugar, on an average, will answer the purpose of half a gallon of spirits of wine.

4. The medicinal wines are more efficacious and agreeable than any other form of preparation.

Dr. Lane recommended the process to be tried, more especially with opium, gentian, and senna, and gave the following directions: Either of the medicines is to be repeatedly macerated in hot water, until the active medicinal matter is judged to be extracted, and a sufficient bulk of fluid is obtained to make an infusion in the same proportional strength as the respective tinctures; cold water only may be used to digest the senna if preferred, and will probably be equally efficient. The infusion is then to be strained off with sufficient pressure; but in respect of the opium, its entire bulk should be submitted to the fermenting process, with the exception of the coarse fibrous matter, which can readily be separated by filtering through fine canvass. In the next place, twelve ounces of white sugar are to be dissolved in each wine quart of the obtained watery extract, and the liquid being then placed in a wide-mouthed glass vessel, is to have a teaspoonful of good yeast added; it is then to be lightly covered over, and kept in a warm room, where the temperature is pretty equable (from 60° to 70°); a high shelf in a kitchen is one of the best places which can be selected, as even at night more heat will be retained in the upper part of that apartment than elsewhere. Fermentations will progress more or less rapidly, and any supernatant scum may be removed from time to time. After three or four weeks, the intensity of the chemical action will be found to diminish materially; the sweetness will have gone off, and a considerable sediment will have been thrown down. The liquid will then have assumed the vinous character, and should be carefully decanted and strained from the dregs; then replaced, and